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EXAMINER

AMINI, JAVID A

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/778,704

Applicant(s)

EDGE ET AL.

Examiner

Javid A Amini

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☒ Claim(s) 1-42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-4, 6-11, 13, 18-24, 28-30, 32-37 and 39 rejected under 35 U.S.C. 102(e) as being anticipated by Yamamoto with filing date of November 3, 1997.

2. Claim 1.

“A method comprising: generating a first gray element based on an estimated gamma for a green channel of a display device; generating a set of red-blue shifted gray elements that represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray element; and estimating a gray balance of the display device based on user selection of one of the gray elements that appears to most closely blend with a gray background”.

Yamamoto illustrates in Fig. 4 the background color setting, automatic setting and RGB setting; in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels. And also Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back) background color. Yamamoto illustrates in Fig. 7 a flow chart of a control window for setting display conditions of a preview window.

Art Unit: 2672

3. Claim 2.

“The method of claim 1, further comprising characterizing the colorimetric response of the display device based on the estimated gamma and estimated gray balance”.

Yamamoto illustrates in Fig. 8 the chromaticity value uses Y, x, and y values including a luminance Y and chromaticity coordinates (x, y) of the CIE1931 colorimetric system (XYZ colorimetric system).

4. Claim 3.

“The method of claim 1, further comprising: selecting one of a plurality of green elements displayed by a display device that appears to most closely blend with a dithered green background; and estimating the gamma for the green channel of the display device based on the selected green element”. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

5. Claim 4.

“The method of claim 1, the method further comprising: modifying a color image based at least in part on the estimated gray balance; and delivering the modified color image to the display device”. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely

Art Unit: 2672

blend with a gray (combination of white and black) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

6. Claim 6.

“The method of claim 1, further comprising determining the estimated gamma by: selecting one of a first plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background; estimating a coarse gamma for the display device based on the selected one of the first plurality of green elements; selecting one of a second plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background, wherein the second plurality of green elements includes the selected one of the first plurality of green elements; and estimating a fine gamma for the display device based on the selected one of the second plurality of green elements, wherein the estimated fine gamma is the estimated gamma”. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

Art Unit: 2672

7. Claim 7.

“The method of claim 6, wherein the first plurality of green elements represent greater gradations in green intensity than the second plurality of green elements”. The step is inherent because a gradual passing from green elements (one tint or shade) to another have greater gradation in green (color) intensity than the second green elements.

8. Claim 8.

“The method of claim 1, further comprising displaying the first gray element in a substantially central position relative to the red-blue shifted elements, wherein the first gray element includes substantially equal red, green, and blue values based on the estimated gamma for the green channel”. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color.

9. Claim 9.

“The method of claim 1, wherein the red-blue shifted elements do not represent any substantial shift in green away from the color value of the selected green element”. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color.

10. Claim 10.

“The method of claim 1, wherein the estimated gamma is limited to only the green channel”. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a

Art Unit: 2672

gray (combination of white and back) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

11. Claim 11.

“The method of claim 1, further comprising: estimating the blackpoint of the display device; and characterizing the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance”. Yamamoto illustrates in Fig. 8 the chromaticity value uses Y, x, and y values including a luminance Y and chromaticity coordinates (x, y) of the CIE1931 colorimetric system (XYZ colorimetric system).

12. Claim 13.

“The method of claim 11, further comprising: modifying a color image based on the estimated blackpoint, gamma, and gray balance; and delivering the modified color image to the display device”. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

Art Unit: 2672

## 13. Claim 18.

“The system of claim 16, wherein the color profiling process includes: selecting one of a plurality of green elements displayed by a display device that appears to most closely blend with a dithered green background; and estimating the gamma for the green channel of the display device based on the selected green element”. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color.

## 14. Claim 19.

“The system of claim 16, wherein the color profiling process includes determining the estimated gamma by: selecting one of a first plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background; estimating a coarse gamma for the display device based on the selected one of the first plurality of green elements; selecting one of a second plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background, wherein the second plurality of green elements includes the selected one of the first plurality of green elements; and estimating a fine gamma for the display device based on the selected one of the second plurality of green elements, wherein the estimated fine gamma is the estimated gamma”. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the



Art Unit: 2672

background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back) background color.

15. Claim 20.

“The system of claim 19, wherein the first plurality of green elements represents greater gradations in green intensity than the second plurality of green elements”. The step is inherent because a gradual passing from green elements (one tint or shade) to another have greater gradation in green (color) intensity than the second green elements.

16. Claim 21.

“The system of claim 16, wherein the color profiling process includes displaying the first gray element in a substantially central position relative to the red blue shifted elements, wherein the first gray element includes substantially equal red, green, and blue values based on the estimated gamma for the green channel”. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back) background color.

Art Unit: 2672

17. Claim 22.

“The system of claim 16, wherein the red-blue shifted elements do not represent any substantial shift in green away from the color value of the selected green element”. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back) background color.

18. Claim 23.

“The system of claim 16, wherein the estimated gamma is limited to only the green channel”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

19. Claim 24.

“The system of claim 16, wherein the color profiling process includes: estimating the blackpoint of the display device; and including with the information the estimated gamma and estimated blackpoint”, Yamamoto illustrates in Fig. 8 the chromaticity value uses Y, x, and y values including a luminance Y and chromaticity coordinates (x, y) of the CIE1931 colorimetric system (XYZ colorimetric system).

20. Claim 28.

“The computer readable medium of claim 27, wherein the instructions cause the processor to characterize the colorimetric response of the display device based on the estimated gamma and estimated gray balance”, Yamamoto illustrates in Fig. 8 the chromaticity value uses Y, x, and y values including a luminance Y and chromaticity coordinates (x, y) of the CIE1931 colorimetric system (XYZ colorimetric system).

21. Claim 29.

“The computer readable medium of claim 27, wherein the instructions cause the processor to: select one of a plurality of green elements displayed by a display device that appears to most closely blend with a dithered green background; and estimate the gamma for the green channel of the display device based on the selected green element”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

22. Claim 30.

“The computer readable medium of claim 27, wherein the instructions cause the processor to: modify a color image based at least in part on the estimated gray balance; and deliver the modified color image to the display device”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background

Art Unit: 2672

color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

23. Claim 32.

“The computer readable medium of claim 27, wherein the instructions cause the processor to determine the estimated gamma by: selecting one of a first plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background; estimating a coarse gamma for the display device based on the selected one of the first plurality of green elements; selecting one of a second plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background, wherein the second plurality of green elements includes the selected one of the first plurality of green elements; and estimating a fine gamma for the display device based on the selected one of the second plurality of green elements, wherein the estimated fine gamma is the estimated gamma”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

24. Claim 33.

“The computer readable medium of claim 32, wherein the first plurality of green elements represent greater gradations in green intensity than the second plurality of green elements”, The step is inherent because a gradual passing from green elements (one tint or shade) to another have greater gradation in green (color) intensity than the second green elements.

25. Claim 34.

“The computer readable medium of claim 27, wherein the instructions cause the processor to display the first gray element in a substantially central position relative to the red-blue shifted elements, wherein the first gray element includes substantially equal red, green, and blue values based on the estimated gamma for the green channel”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back) background color.

26. Claim 35.

“The computer readable medium of claim 27, wherein the red-blue shifted elements do not represent any substantial shift in green away from the color value of the selected green element”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back) background color.

27. Claim 36.

“The computer readable medium of claim 27, wherein the estimated gamma is limited to only the green channel”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most

Art Unit: 2672

closely blend with a gray (combination of white and back) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

28. Claim 37.

“The computer readable medium of claim 27, wherein the instructions cause the processor to: estimate the blackpoint of the display device; and characterize the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance”, Yamamoto illustrates in Fig. 8 the chromaticity value uses Y, x, and y values including a luminance Y and chromaticity coordinates (x, y) of the CIE1931 colorimetric system (XYZ colorimetric system).

29. Claim 39.

“The computer readable medium of claim 37, wherein the instructions cause the processor to: modify a color image based on the estimated blackpoint, gamma, and gray balance; and deliver the modified color image to the display device”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. Claims 5, 12, 15-17, 26-27, 31, 38 and 41 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto, and further in view of Kumada et al.

31. Claim 5.

“The method of claim 1, wherein the display device is associated with a client residing on a computer network, the method further comprising: transmitting information representing the estimated gray balance to a remote server on the network; modifying the color image at the remote server based on the information; and delivering the modified color image to the client via the computer network for display on the display device”. Yamamoto does not explicitly specify transmitting information via computer network, however, Kumada et al. teaches in page 7 paragraph 96 and figs. 7-8 the same concept using printer, it is well known in the art that instead of a printer one can connect a display system or another computer on the network since they are connected to a server.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kumada into Yamamoto in order to be able to transmit information representing the estimated gray balance to a remote server on the network; modifying the color image at the remote server based on the information and etc. and also

Art Unit: 2672

conversion errors in the inverse masking processing can be reduced as compared to the prior art, thus improving the color reproducibility of the preview image display, another reason to combine is particularly advantageous since the color reproduction characteristic of an output device obtained by performing calibration processing in regard to the image output characteristic of the output device is reflected when device-independent data is converted to data that depends upon output device or when data that depends upon output device is converted to device-independent data.

32. Claim 12.

“The method of claim 11, wherein the display device is associated with a client residing on a computer network, the method further comprising: transmitting information representing the estimated blackpoint, gamma, and gray balance to a remote server on the network; modifying the color image at the remote server based on the information; and delivering the modified color image to the client via the computer network for display on the display device”. Yamamoto does not explicitly specify transmitting information via computer network, however, Kumada et al. teaches in page 7 paragraph 96 and figs. 7-8 the same concept using printer, it is well known in the art that instead of a printer one can connect a display system or another computer on the network since they are connected to a server.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kumada into Yamamoto in order to be able to transmit information representing the estimated gray balance to a remote server on the network; modifying the color image at the remote server based on the information and etc. and also



conversion errors in the inverse masking processing can be reduced as compared to the prior art, thus improving the color reproducibility of the preview image display, another reason to combine is particularly advantageous since the color reproduction characteristic of an output device obtained by performing calibration processing in regard to the image output characteristic of the output device is reflected when device-independent data is converted to data that depends upon output device or when data that depends upon output device is converted to device-independent data.

33. Claim 15.

“The method of claim 1, wherein the display device is associated with a client on a computer network, the method further comprising guiding the client through the process of obtaining the estimated gray balance by delivering one or more instructional web pages to the client”.

Yamamoto does not explicitly specify transmitting information via computer network, however, Kumada et al. teaches in page 7 paragraph 96 and figs. 7-8 the same concept using printer, it is well known in the art that instead of a printer one can connect a display system or another computer on the network since they are connected to a server and internet.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kumada into Yamamoto in order to be able to transmit information representing the estimated gray balance to a remote server on the network; modifying the color image at the remote server based on the information and etc. and also conversion errors in the inverse masking processing can be reduced as compared to the prior art, thus improving the color reproducibility of the preview image display, another reason to combine

Art Unit: 2672

is particularly advantageous since the color reproduction characteristic of an output device obtained by performing calibration processing in regard to the image output characteristic of the output device is reflected when device-independent data is converted to data that depends upon output device or when data that depends upon output device is converted to device-independent data.

34. Claim 16.

“A system comprising: a web server residing on a computer network, the web server transmitting web pages to remote clients residing on the computer network; a color image server residing on the computer network, the color image server transmitting color images referenced by the web pages to the clients for display on display devices associated with the clients; a color profile server residing on the computer network, the color profile server guiding the clients through a color profiling process to obtain information characterizing the color responses of the display devices associated with the clients, wherein the information includes a gray balance for each of the display devices, and the color profiling process includes: displaying a first gray element based on an estimated gamma for the green channel of the display device, displaying a set of red-blue shifted gray elements that represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray value, selecting one of the gray values that appears to most closely blend with a gray background, and estimating the gray balance of the display device based on the selected gray element; and one or more color correction modules that modify the color images transmitted by the color image server based on the information to improve the accuracy of the color images when displayed on the respective

display device". Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color. Yamamoto does not explicitly specify transmitting information via computer network, however, Kumada et al. teaches in page 7 paragraph 96 and figs. 7-8 the same concept using printer, it is well known in the art that instead of a printer one can connect a display system or another computer on the network since they are connected to a server and internet. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kumada into Yamamoto in order to be able to transmit information representing the estimated gray balance to a remote server on the network; modifying the color image at the remote server based on the information and etc. and also conversion errors in the inverse masking processing can be reduced as compared to the prior art, thus improving the color reproducibility of the preview image display, another reason to combine is particularly advantageous since the color reproduction characteristic of an output device obtained by performing calibration processing in regard to the image output characteristic of the output device is reflected when device-independent data is converted to data that depends upon output device or when data that depends upon output device is converted to device-independent data.

“The system of claim 16, wherein the color image server stores the information to the client in a web cookie, the client transmits the web cookie from the client to the server, and the color image server modifies the color image via the server based on the contents of the web cookie”.

Yamamoto does not explicitly specify transmitting information via computer network, however, Kumada et al. teaches in page 7 paragraph 96 and figs. 7-8 the same concept using printer, it is well known in the art that instead of a printer one can connect a display system or another computer on the network since they are connected to a server.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kumada into Yamamoto in order to be able to transmit information representing the estimated gray balance to a remote server on the network; modifying the color image at the remote server based on the information and etc. and also conversion errors in the inverse masking processing can be reduced as compared to the prior art, thus improving the color reproducibility of the preview image display, another reason to combine is particularly advantageous since the color reproduction characteristic of an output device obtained by performing calibration processing in regard to the image output characteristic of the output device is reflected when device-independent data is converted to data that depends upon output device or when data that depends upon output device is converted to device-independent data.

36. Claim 26.

“The method of claim 16, wherein the display device is associated with a client on a computer network, the method further comprising guiding the client through the process of obtaining the

Art Unit: 2672

estimated gray balance by delivering one or more instructional web pages to the client”, Yamamoto does not explicitly specify transmitting information via computer network, however, Kumada et al. teaches in page 7 paragraph 96 and figs. 7-8 the same concept using printer, it is well known in the art that instead of a printer one can connect a display system or another computer on the network since they are connected to a server and internet.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kumada into Yamamoto in order to be able to transmit information representing the estimated gray balance to a remote server on the network; modifying the color image at the remote server based on the information and etc. and also conversion errors in the inverse masking processing can be reduced as compared to the prior art, thus improving the color reproducibility of the preview image display, another reason to combine is particularly advantageous since the color reproduction characteristic of an output device obtained by performing calibration processing in regard to the image output characteristic of the output device is reflected when device-independent data is converted to data that depends upon output device or when data that depends upon output device is converted to device-independent data.

37. Claim 27.

“A computer readable medium containing instructions that cause a programmable processor to: generate a first gray element based on an estimated gamma for a green channel of a display device; generate a set of red-blue shifted gray elements that represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray element;

and generate a gray balance of the display device based on user selection of one of the gray elements that appears to most closely blend with a gray background”, Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color. Yamamoto does not explicitly specify transmitting information via computer network, however, Kumada et al. teaches in page 7 paragraph 96 and figs. 7-8 the same concept using printer, it is well known in the art that instead of a printer one can connect a display system or another computer on the network since they are connected to a server and internet.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kumada into Yamamoto in order to be able to transmit information representing the estimated gray balance to a remote server on the network; modifying the color image at the remote server based on the information and etc. and also conversion errors in the inverse masking processing can be reduced as compared to the prior art, thus improving the color reproducibility of the preview image display, another reason to combine is particularly advantageous since the color reproduction characteristic of an output device obtained by performing calibration processing in regard to the image output characteristic of the output device is reflected when device-independent data is converted to data that depends upon output device or when data that depends upon output device is converted to device-independent data.

38. Claim 31.

“The computer readable medium of claim 27, wherein the display device is associated with a client residing on a computer network, and the instructions cause the processor to: transmit information representing the estimated gray balance to a remote server on the network; modify the color image at the remote server based on the information; and deliver the modified color image to the client via the computer network for display on the display device”, Yamamoto does not explicitly specify transmitting information via computer network, however, Kumada et al. teaches in page 7 paragraph 96 and figs. 7-8 the same concept using printer, it is well known in the art that instead of a printer one can connect a display system or another computer on the network since they are connected to a server.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kumada into Yamamoto in order to be able to transmit information representing the estimated gray balance to a remote server on the network; modifying the color image at the remote server based on the information and etc. and also conversion errors in the inverse masking processing can be reduced as compared to the prior art, thus improving the color reproducibility of the preview image display, another reason to combine is particularly advantageous since the color reproduction characteristic of an output device obtained by performing calibration processing in regard to the image output characteristic of the output device is reflected when device-independent data is converted to data that depends upon output device or when data that depends upon output device is converted to device-independent data.

39. Claim 38.

“The computer readable medium of claim 37, wherein the display device is associated with a client residing on a computer network, and the instructions cause the processor to: transmit information representing the estimated blackpoint, gamma, and gray balance to a remote server on the network; modify the color image at the remote server based on the information; and deliver the modified color image to the client via the computer network for display on the display device”, Yamamoto does not explicitly specify transmitting information via computer network, however, Kumada et al. teaches in page 7 paragraph 96 and figs. 7-8 the same concept using printer, it is well known in the art that instead of a printer one can connect a display system or another computer on the network since they are connected to a server.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kumada into Yamamoto in order to be able to transmit information representing the estimated gray balance to a remote server on the network; modifying the color image at the remote server based on the information and etc. and also conversion errors in the inverse masking processing can be reduced as compared to the prior art, thus improving the color reproducibility of the preview image display, another reason to combine is particularly advantageous since the color reproduction characteristic of an output device obtained by performing calibration processing in regard to the image output characteristic of the output device is reflected when device-independent data is converted to data that depends upon output device or when data that depends upon output device is converted to device-independent data



40. Claim 41.

“The computer readable medium of claim 27, wherein the display device is associated with a client on a computer network, and the instructions cause the processor to guide the client through the process of obtaining the estimated gray balance by delivering one or more instructional web pages to the client”, Yamamoto does not explicitly specify transmitting information via computer network, however, Kumada et al. teaches in page 7 paragraph 96 and figs. 7-8 the same concept using printer, it is well known in the art that instead of a printer one can connect a display system or another computer on the network since they are connected to a server and internet.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kumada into Yamamoto in order to be able to transmit information representing the estimated gray balance to a remote server on the network; modifying the color image at the remote server based on the information and etc. and also conversion errors in the inverse masking processing can be reduced as compared to the prior art, thus improving the color reproducibility of the preview image display, another reason to combine is particularly advantageous since the color reproduction characteristic of an output device obtained by performing calibration processing in regard to the image output characteristic of the output device is reflected when device-independent data is converted to data that depends upon output device or when data that depends upon output device is converted to device-independent data

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

41. Claims 14, 25 and 40 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The term “approximately 33% gray background” is not shown how 33% calculated in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

42. Claim 42 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The invention is about color imaging and presentation of color images on display devices. Applicant is claiming physical data storage and signal transmitted between computers in claim 42.

***Conclusion***

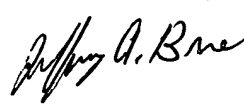
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-8705 for regular communications and 703-746-8705 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid A Amini  
Examiner  
Art Unit 2672

Javid Amini  
February 24, 2003

  
JEFFERY BRIER  
PRIMARY EXAMINER